1) Improvements to Roads and Drains at Suverna Mahothsava Ground near HMT Layout, Sapthagiri Layout Thindlu Surroundings in Ward No.09, (Vidyaranyapura).

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Improvements to Roads and Drains at Suverna Mahothsava Ground near HMT Layout, Sapthagiri Layout Thindlu Surroundings in Ward No.09, (Vidyaranyapura).

								Estimation Cost.Rs	9000000.00
Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
1.00	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80								
	New Drain								
	HMT 5th Block, 12th Main Road	Cum	2.00	375.00	1.00	1.00	750.00		
	Culvert								
	5th Cross Road	Cum	1.00	8.50	2.00	1.00	17.00		
	3rd Cross Road	Cum	1.00	8.50	2.00	1.00	17.00		
	Cross Road	Cum	2.00	8.00	2.00	1.00	32.00		
	Drain Desilting								
	NTI Layout								
	10th Main Road								
	LHS	Cum	1.00	182.00	0.45	0.45	36.86		
	RHS	Cum	1.00	182.00	0.45	0.45	36.86		
	10th Main Road								
	LHS	Cum	1.00	84.00	0.45	0.45	17.01		
	RHS	Cum	1.00	84.00	0.45	0.45	17.01		
	6th Cross Road	Cum	2.00	128.00	0.45	0.45	51.84		
	Over Burden								
		Cum	1.00	25.00	0.45	0.40	4.50		
	Basic rate	130.00							
	Area weightage 6%	7.80							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	207.60							
	Total						**980.07**	**207.60**	**203463.00**
2.00	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.27-I.No.5.33)								
	Drain Cover Slab								
	NTI Layout								
	10th Main Road								
	LHS	Sqm	1.00	182.00	0.90		163.80		
	10th Main Road								
	LHS	Sqm	1.00	84.00	0.90		75.60		
					Sub Total		**239.40**		
	Consider 30% Qnty for Removing & Refixing						71.82		
	HMT 5th Block, 12th Main Road (Available Cover Slab in Front of House)	Sqm	2.00	50.00	0.90		90.00		
	Basic rate	105.00							
	Area weightage 6%	6.30							

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Sub Total	**111.30**							
	Total						**161.82**	**111.30**	**18011.00**
3.00	KSRRB M2100 PCC 1 KSRRB M2100-10. Providing and laying Plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days Including cost of materials,labour, HOM curing form work, Scaffolding and Centering complete as per specifications.MORTH Specification No. 2100 Pg no:222 Item no:27.18								
	New Drain								
	HMT 5th Block, 12th Main Road	Cum	2.00	375.00	1.00	0.15	112.50		
	Culvert								
	5th Cross Road	Cum	1.00	8.50	1.80	0.15	2.30		
	3rd Cross Road	Cum	1.00	8.50	1.80	0.15	2.30		
	Cross Road	Cum	2.00	8.00	1.80	0.15	4.32		
	Kerb Stone								
	HMT 5th Block, 12th Main Road	Cum	2.00	300.00	0.20	0.05	6.00		
	Basic rate	5115.00							
	Deduct the Cement cost as per SR 2018-19 (220x245.31/50)	-1079.36							
	Add the Cement cost as per Issue Rate 2018-19 (240x264.06/50) 220X	1161.86							
	Sub total	5197.50							
	Area weightage 6%	311.85							
	Sub Total	5509.35							
	Total						**127.41**	**5509.35**	**701946.00**
4.00	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	New Drain								
	HMT 5th Block, 12th Main Road								
	Bottom Slab	Cum	2.00	375.00	0.90	0.15	101.25		
	Side Walls	Cum	4.00	375.00	0.15	0.60	135.00		
					Sub Total		**236.25**		
	Culvert								
	5th Cross Road								
	Bottom Slab	Cum	1.00	8.50	1.80	0.20	3.06		
	Side Walls	Cum	2.00	8.50	0.20	0.60	2.04		
	3rd Cross Road								
	Bottom Slab	Cum	1.00	8.50	1.80	0.20	3.06		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Side Walls	Cum	2.00	8.50	0.20	0.60	2.04		
	Cross Road								
	Bottom Slab	Cum	2.00	8.00	1.80	0.20	5.76		
	Side Walls	Cum	4.00	8.00	0.20	0.60	3.84		
					Sub Total		**19.80**		
	Basic rate	6670.00							
	Deduct the Cement cost as per SR 2018-19 (300x245.31/50)	-1471.86							
	Add the Cement cost as per Issue Rate 2018-19 (300x264.06/50)	1584.36							
	Sub total	6782.50							
	Area weightage 6%	406.95							
	Sub Total	7189.45							
	Total						**256.05**	**7189.45**	**1840859.00**
5.00	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.13, I.No. 4.6 of PWD SR 2018-19)								
	For Ramp								
	Culvert								
	6th Main Road	Cum	2.00	7.50	0.80	0.20	2.40		
	5th Main Road	Cum	2.00	7.50	0.80	0.20	2.40		
	3rd Main Road	Cum	2.00	7.50	0.80	0.20	2.40		
	2nd Main Road	Cum	2.00	8.00	0.80	0.20	2.56		
	5th Cross Road	Cum	2.00	8.50	0.80	0.20	2.72		
	3rd Cross Road	Cum	2.00	8.50	0.80	0.20	2.72		
	Basic rate	5422.00							
	Deduct the Cement cost as per SR 2018-19 (240x245.31/50)	-1177.49							
	Add the Cement cost as per Issue Rate 2018-19 (240x264.06/50)	1267.49							
	Sub total	5512.00							
	Area weightage 6%	330.72							
	Sub Total	5842.72							
	Total						**15.20**	**5842.72**	**88809.00**
6.00	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	For Drain	**Cum**	**From item No 04**				**236.25**		
			Steel assumed 60Kg/Cum of Concrete				**14175.00**		
		tonne					**14.18**		
	For Culvert	**Cum**	**From item No 04**				**19.80**		
			Steel assumed 90Kg/Cum of Concrete				**1782.00**		
		tonne					**1.78**		
	Basic rate	68233.00							
	Area weightage 6%	4093.98							
	Sub Total	72326.98							
	Total						**15.96**	**72326.98**	**1154122.00**
7.00	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2018-19)								
	SSM Wall								
	Culvert								
	6th Main Road	Cum	2.00	7.50	0.45	0.90	6.08		
	5th Main Road	Cum	2.00	7.50	0.45	0.90	6.08		
	3rd Main Road	Cum	2.00	7.50	0.45	0.90	6.08		
	2nd Main Road	Cum	2.00	8.00	0.45	0.90	6.48		
					Sub Total		**24.71**		
	Provide 50% qnty for missing and Damaged						**12.35**		
	Basic rate	4596.00							
	Area weightage 6%	275.76							
	Sub Total	4871.76							
	Total						**12.35**	**4871.76**	**60178.00**
8.00	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of all materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	New Drain								
	HMT 5th Block, 12th Main Road	Sqm	2.00	375.00	0.90		675.00		
	HMT 5th Block, 12th Main Road (Available Cover Slab in Front of House)	Sqm	2.00	50.00	0.90		-90.00		
	For Missing Cover Slab	Sqm	1.00	6.00	0.90		5.40		
	Data rate	**2337.00**							
	Total						**590.40**	**2337.00**	**1379765.00**

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
9.00	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge of the work								
	Culvert								
	6th Main Road	Sqm	1.00	7.50	1.80		13.50		
	5th Main Road	Sqm	1.00	7.50	1.80		13.50		
	3rd Main Road	Sqm	1.00	7.50	1.80		13.50		
	2nd Main Road	Sqm	1.00	8.00	1.80		14.40		
	5th Cross Road	Sqm	1.00	8.50	1.80		15.30		
	3rd Cross Road	Sqm	1.00	8.50	1.80		15.30		
	Cross Road	Sqm	2.00	8.00	1.80		28.80		
	Data rate	**5418.00**							
	Total						**114.30**	**5418.00**	**619277.00**
10.00	Providing and fixing **pre cast solid cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
	Kerb Stone								
	HMT 5th Block, 12th Main Road		2.00	300.00			600.00		
					Sub Total		**600.00**		
	Total length						600.00		
	No of Kerb Stones	Nos	Total Length/0.45				1333		
	Sub Total	Nos					**1333**		
	Basic rate	408.00							
	Area weightage 6%	24.48							
	Sub Total	432.48							
	Total						**1333**	**432.48**	**576640.00**
11.00	KSRB 15-19.1 : Providing and applying ready mix priming coat over concrete / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications.								
	Kerb Stone								
	HMT 5th Block, 12th Main Road	Sqm	2.00	300.00		0.40	240.00		
	Basic rate	37.00							
	Area weightage 6%	2.22							
	Sub Total	39.22							
	Total						**240.00**	**39.22**	**9413.00**
12.00	KSRRB 800-1. **Painting two coats** after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180. Iitem no.24.1 of KPWD S.R Bangalore Circle 2018-2019)								
	Kerb Stone								
	HMT 5th Block, 12th Main Road	Sqm	2.00	300.00		0.40	240.00		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Basic rate	80.00							
	Area weightage 6%	4.80							
	Sub Total	84.80							
	Total						**240.00**	**84.80**	**20352.00**
13.00	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)								
	Road cut portion								
	NTI Layout								
	10th Main Road	Cum	1.00	26.00	2.00	0.23	11.96		
	6th Cross Road	Cum	1.00	40.00	2.00	0.23	18.40		
		Cum	1.00	128.00	0.60	0.23	17.66		
	Basic rate	41.00							
	Area weightage 6%	2.46							
	5Km lead= (2*1.28*5)	12.80							
	Sub Total	**56.26**							
	Total						**48.02**	**56.26**	**2702.00**
14.00	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Road cut portion								
	NTI Layout								
	10th Main Road	Cum	1.00	26.00	2.00	0.23	11.96		
	6th Cross Road	Cum	1.00	40.00	2.00	0.23	18.40		
		Cum	1.00	128.00	0.60	0.23	17.66		
	Basic rate	1888.00							
	Area weightage 6%	113.28							
	Sub Total	2001.28							
	Total						**48.02**	**2001.28**	**96109.00**
15.00	KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	Road cut portion								
	NTI Layout								
	10th Main Road	Sqm	1.00	26.00	2.00		52.00		
	6th Cross Road	Sqm	1.00	40.00	2.00		80.00		
		Sqm	1.00	128.00	0.60		76.80		
	for old Road Provide 25% Profile Correction	Sqm	from item no 16=(2588.40X25%)=647.10				647.10		
	Basic rate	27.00							
	Area weightage 6%	1.62							

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Sub Total	28.62							
	Total						**855.90**	**28.62**	**24496.00**
16.00	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.158,I.No.21.2).								
	Old Roads								
	NTI Layout								
	10th Main Road	Sqm	1.00	84.00	6.20		520.80		
	6th Cross Road	Sqm	1.00	128.00	6.20		793.60		
	10th Main Road	Sqm	1.00	182.00	7.00		1274.00		
	Basic rate	5.00							
	Area weightage 6%	0.30							
	Sub Total	**5.30**							
	Total						**2588.40**	**5.30**	**13719.00**
17.00	KSRRB 500-7. Providing and **applying tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	Old Road	Sqm	From Item no. 16				2588.40		
	Basic rate	12.00							
	Area weightage 6%	0.72							
	Sub Total	**12.72**							
	Total						**2588.40**	**12.72**	**32924.00**
18.00	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	old Road								
	for old Road Provide 25% Profile Correction		from item no16=(2588.40X25%)=647.10				2588.40		
		Cum		647.10		0.05	32.36		
	Road cut portion								
	NTI Layout								
	10th Main Road	Cum	1.00	26.00	2.00	0.05	2.60		
	6th Cross Road	Cum	1.00	40.00	2.00	0.05	4.00		
		Cum	1.00	128.00	0.60	0.05	3.84		
	Basic rate	6224.00							
	Area weightage 6%	373.44							
	Sub Total	**6597.44**							
	Total						**42.80**	**6597.44**	**282337.00**

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
19.00	Providing and laying Bituminous Concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment , rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications.Clause 507 of MORTH V revision as per IRC SP-53-2015 - using 40-60 TPH capacity HMP with mechanical Paver, Gr-II (30-45mm) with 5.4 % of modified bitumen binder consisting of 4.97% VG- 30 bitumen (60/70 grade) 0.43% Plastomeric Thermoplastics (Waste plastic Additive).(P.No-171I No-21.78.12)								
	NTI Layout								
	10th Main Road	Cum	1.00	84.00	6.20	0.04	20.83		
	6th Cross Road	Cum	1.00	128.00	6.20	0.04	31.74		
	10th Main Road	Cum	1.00	182.00	7.00	0.04	50.96		
	Basic rate	7315.00							
	Area weightage 6%	438.90							
	Sub Total	7753.90							
	Total						**103.54**	**7753.90**	**802808.00**
20.00	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	NTI Layout								
	10th Main Road	Sqm	2.00	84.00	0.10		16.80		
	6th Cross Road	Sqm	2.00	128.00	0.10		25.60		
	10th Main Road	Sqm	2.00	182.00	0.10		36.40		
	Basic rate	429.00							
	Area weightage 6%	25.74							
	Sub Total	454.74							
	Total						**78.80**	**454.74**	**35834.00**
								Grand Total	**7963764.00**
								GST Charges (12% of estimated cost)	**955652.00**
								Project management And Consultancy Charges(1% of estimated cost)	**79638.00**
								Miscellenious and rounding	**946.00**
								Total Amount	**9000000.00**

ADMINISTRATIVE APPROVAL
Accorded For Rs. 90.00 lathe only
Head of A/c P3698
Our Ref. No. 104/19-20 Date 29-2-2020
AE
EE(BTP)

CERTIFICATE:

1) The work spot has been inspected and found to be necessary.
2) The work spot comes under B.B.M.P.
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

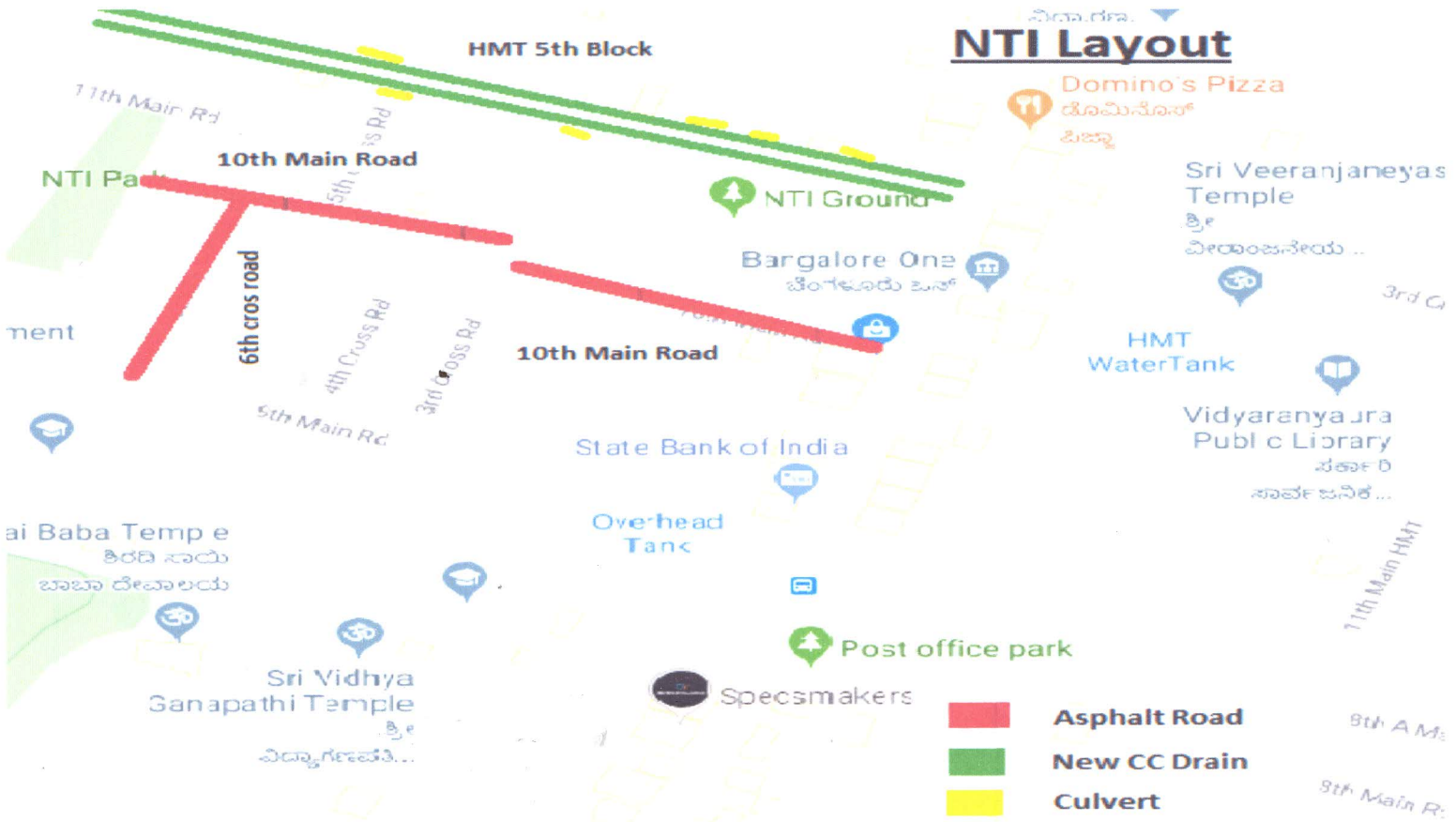
Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

Executive Engineer
Byataraayanapura Division

Rs in Words Rs.90,00,000/- (NINETY LAKH ONLY)
Under P3698
Job Code No 009-20-000057
Registered as SE(Y)/TS/ 36 /19-20 subject to conditions contained in enclosed memo No 36 /19-20 Dated: 04/03/2020

1) Improvements to Roads and Drains at Suverna Mahothsava Ground near HMT Layout, Thindlu Surroundings in Ward No.09, (Vidyaranyapura), Vidyaranyapura Sub Division.2) Construction of RCC Drain at Somanna Garden N/S of Main Road in Ward No.09, (Vidyaranyapura), Vidyaranyapura Sub Division.3) Construction of RCC Drain and Improvements of Roads at K. Veeranna Layout near Alkon Pearl Apartment in ward No.09 , (Vidyaranyapura), Vidyaranyapura Sub Division.



RUDRAPRASAD CONSULTANTS

AE W-09

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

2) Construction of RCC Drain at Somanna Garden N/S of Main Road in Ward No.09, (Vidyaranyapura).

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Construction of RCC Drain at Somanna Garden N/S of Main Road in Ward No.09, (Vidyaranyapura).

Estimation Cost.Rs 5500000.00

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
1.00	KSRRB M200-12.2. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. i) Lime /Cement Concrete. I. By Manual Means :B. Cement Concrete Grade M-15 & M-20. MORTH Specification No. 202. Page No. 139, Item No.18.18 and Pg No.136, Item No.~~17.4,17.1~~ 18. (5km lead = 57+2*1.28X5)								
	Culvert								
	Somanna Garden								
	Deck Slab								
	Cross Road	Cum	1.00	7.00	1.20	0.15	1.26		
	Side Wall								
	Cross Road	Cum	2.00	7.00	0.15	0.60	1.26		
	Basic rate	557.00							
	Area weightage 6%	33.42							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	660.22							
	Total						**2.52**	**660.22**	**1664.00**
2.00	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80								
	New Drain								
	Somanna Garden								
	2nd Main Road to GKVK Main Road	Cum	2.00	82.00	1.00	0.95	155.80		
	Main Road	Cum	1.00	343.00	1.00	0.95	325.85		
	Cross Road	Cum	1.00	27.00	0.75	1.00	20.25		
	Cross Road	Cum	2.00	67.00	0.75	1.00	100.50		
	Culvert								
	Somanna Garden								
	1st Main Road	Cum	1.00	7.00	1.20	0.95	7.98		
	Cross Road	Cum	1.00	7.00	1.20	0.95	7.98		
	Basic rate	130.00							
	Area weightage 6%	7.80							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	207.60							
	Total						**618.36**	**207.60**	**128372.00**
3.00	KSRRB M2100 PCC 1 KSRRB M2100-10. Providing and laying Plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days Including cost of materials,labour, HOM curing form work, Scaffolding and Centering complete as per specifications.MORTH Specification No. 2100 Pg no:222 Item no:27.18								
	New Drain								
	Somanna Garden								

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	2nd Main Road to GKVK Main Road	Cum	2.00	82.00	1.00	0.15	24.60		
	Main Road	Cum	1.00	343.00	1.00	0.15	51.45		
	Cross Road	Cum	1.00	27.50	0.75	0.15	3.09		
	Cross Road	Cum	2.00	67.00	0.75	0.15	15.08		
	Culvert								
	Somanna Garden								
	1st Main Road	Cum	1.00	7.00	1.20	0.15	1.26		
	Cross Road	Cum	1.00	7.00	1.20	0.15	1.26		
	Kerb Stone								
	Somanna Garden								
	Main Road	Cum	1.00	343.00	0.20	0.05	3.43		
	Basic rate	5115.00							
	Deduct the Cement cost as per SR 2018-19 (220x245.31/50)	-1079.36							
	Add the Cement cost as per Issue Rate 2018-19 (240x264.06/50)	1161.86							
	Sub total	5197.50							
	Area weightage 6%	311.85							
	Sub Total	5509.35							
	Total						**100.17**	**5509.35**	**551865.00**
4.00	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	New Drain								
	Somanna Garden								
	2nd Main Road to GKVK Main Road								
	Bottom Slab	Cum	2.00	82.00	0.90	0.15	22.14		
	Side Walls	Cum	4.00	82.00	0.15	0.60	29.52		
	Main Road								
	Bottom Slab	Cum	1.00	343.00	0.90	0.15	46.31		
	Side Walls	Cum	2.00	343.00	0.15	0.60	61.74		
	Cross Road								
	Bottom Slab	Cum	1.00	27.00	0.75	0.15	3.04		
	Side Walls	Cum	2.00	27.00	0.15	0.60	4.86		
	Cross Road								
	Bottom Slab	Cum	2.00	67.00	0.75	0.15	15.08		
	Side Walls	Cum	4.00	67.00	0.15	0.60	24.12		
					Sub Total		**206.80**		
	Culvert								
	Somanna Garden								
	1st Main Road								
	Bottom Slab	Cum	1.00	7.00	1.20	0.20	1.68		
	Side Walls	Cum	2.00	7.00	0.20	0.60	1.68		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Cross Road								
	Bottom Slab	Cum	1.00	7.00	1.20	0.20	1.68		
	Side Walls	Cum	2.00	7.00	0.20	0.60	1.68		
					Sub Total		**6.72**		
	Basic rate	6670.00							
	Deduct the Cement cost as per SR 2018-19 (300x245.31/50)	-1471.86							
	Add the Cement cost as per Issue Rate 2018-19 (300x264.06/50)	1584.36							
	Sub total	6782.50							
	Area weightage 6%	406.95							
	Sub Total	7189.45							
	Total						**213.52**	**7189.45**	**1535073.00**
5.00	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.13, I.No. 4.6 of PWD SR 2018-19)								
	For Ramp								
	Culvert								
	Somanna Garden								
	1st Main Road	Cum	2.00	7.00	0.80	0.20	2.24		
	Cross Road	Cum	2.00	7.00	0.80	0.20	2.24		
	Basic rate	5422.00							
	Deduct the Cement cost as per SR 2018-19 (240x245.31/50)	-1177.49							
	Add the Cement cost as per Issue Rate 2018-19 (240x264.06/50)	1267.49							
	Sub total	5512.00							
	Area weightage 6%	330.72							
	Sub Total	5842.72							
	Total						**4.48**	**5842.72**	**26175.00**
6.00	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	**Cum**	**From item No 04**				**206.80**		
			Steel assumed 60Kg/Cum of Concrete				**12407.85**		
		tonne					**12.41**		
	For Culvert	**Cum**	**From item No 04**				**6.72**		
			Steel assumed 90Kg/Cum of Concrete				**604.80**		
		tonne					**0.60**		
	Basic rate	68233.00							

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Area weightage 6%	4093.98							
	Sub Total	72326.98							
	Total						**13.01**	**72326.98**	**941166.00**
7.00	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	New Drain								
	Somanna Garden								
	2nd Main Road to GKVK Main Road	Sqm	2.00	82.00	0.90		147.60		
	Main Road	Sqm	1.00	343.00	0.90		308.70		
	For Missing Cover Slab	Sqm	1.00	2.50	0.90		2.25		
	Data rate	**2337.00**							
	Total						**458.55**	**2337.00**	**1071631.00**
8.00	Providing and laying 100mm thick pre-cast cover slabs over drains of width not exceeding 800mm using M20 concrete reinforced with steel @6.00kg/Sqm, slabs jointed in CM 1:3 proportion and nicely finished including providing holes in the Cover slabs wherever necessary for easy drainage of surface water including of labour, materials,HOM, curing, lead and lift charges etc, complete as per MORTH specifications No.1500, 1700(P.No.272-I.No.37.66)								
	Somanna Garden								
	Cross Road	m	1.00	27.00			27.00		
	Cross Road	m	2.00	67.00			134.00		
	Basic rate	1081.00							
	Area weightage 6%	64.86							
	Sub Total	1145.86							
	Total						**161.00**	**1145.86**	**184483.00**
9.00	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer in charge.								
	Culvert								
	Somanna Garden								
	1st Main Road	Sqm	1.00	7.00	1.20		8.40		
	Cross Road	Sqm	1.00	7.00	1.20		8.40		
	Data rate	**5418.00**							
	Total						**16.80**	**5418.00**	**91022.00**
10.00	Providing and fixing **pre cast solid cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer in charge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
	Kerb Stone								
	Somanna Garden								
	Main Road		1.00	343.00			343.00		
	Deduction For Culvert		2.00	5.50			-11.00		
					Sub Total		**332.00**		
	Total length						332.00		
	No of Kerb Stones	Nos	Total Length/0.45				738		
	Sub Total	Nos					**738**		
	Basic rate	408.00							
	Area weightage 6%	24.48							
	Sub Total	432.48							

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Total						**738**	**432.48**	**319074.00**
11.00	KSRB 15-19.1 : Providing and applying ready mix priming coat over concrete / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications.								
	Kerb Stone								
	Somanna Garden								
	Main Road	Sqm	1.00	343.00		0.40	137.20		
	Deduction For Culvert	Sqm	2.00	5.50		0.40	-4.40		
	Basic rate	37.00							
	Area weightage 6%	2.22							
	Sub Total	39.22							
	Total						**132.80**	**39.22**	**5208.00**
12.00	KSRRB 800-1. **Painting two coats** after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180. Iitem no.24.1 of KPWD S.R Bangalore Circle 2018-2019)								
	Kerb Stone								
	Somanna Garden								
	Main Road	Sqm	1.00	343.00		0.40	137.20		
	Deduction For Culvert	Sqm	2.00	5.50		0.40	-4.40		
	Basic rate	80.00							
	Area weightage 6%	4.80							
	Sub Total	84.80							
	Total						**132.80**	**84.80**	**11261.00**
								Grand Total	**4866994.00**
								GST Charges (12% of estimated cost)	**584039.00**
								Project management And Consultancy Charges(1% of estimated cost)	**48670.00**
								Miscellenious and rounding	**297.00**
								Total Amount	**5500000.00**

CERTIFICATE:

1) The work spot has been inspected and found to be necessary.
2) The work spot comes under B.B.M.P.
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

Executive Engineer
Byatarayanapura Division

ADMINISTRATIVE APPROVAL
Accorded For Rs. 55.00 Lakhs only
Head of A/c. P3698
Div. Ref. No. 103/19-20 Date 29-02-2020
AE 5/03
EE(BTP) 5/03

...closed for Rs. 55,00,000/-
...FIFTY FIVE LAKH ONLY
Under P3698
Job Code No. 009-20-000056
Registered as SE(Y)/TS/ 37 / 19-20 subject to conditions contained in enclosed memo
37 / 19-20 Dated: 04/03/2020

1) Improvements to Roads and Drains at Suverna Mahothsava Ground near HMT Layout, Thindlu Surroundings in Ward No.09, (Vidyaranyapura), Vidyaranyapura Sub Division.2) Construction of RCC Drain at Somanna Garden N/S of Main Road in Ward No.09, (Vidyaranyapura), Vidyaranyapura Sub Division.3) Construction of RCC Drain and Improvements of Roads at K. Veeranna Layout near Alkon Pearl Apartment in ward No.09 , (Vidyaranyapura), Vidyaranyapura Sub Division.

Somanna Garden

GKVK Rd

Th ndl

M

Governme

New CC Drain

Culvert

RUDRAPRASAD CONSULTANTS

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

3) Construction of RCC Drain and Improvements of Roads at K. Veeranna Layout near Alkon Pearl Apartment in ward No.09 , (Vidyaranyapura).

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Construction of RCC Drain and Improvements of Roads at K. Veeranna Layout near Alkon Pearl Apartment in ward No.09 , (Vidyaranyapura).

Estimation Cost.Rs 5500000.00

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
1.00	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80								
	New Drain								
	K Veeranna Layout								
	Alkon Spirial Apartment Road	Cum	1.00	40.00	1.00	1.00	40.00		
	Sumadhuras Mathrushree Residency	Cum	1.00	42.00	1.50	1.00	63.00		
	Drain Desilting								
	IHECS Layout								
	6th Main Road	Cum	2.00	62.00	0.60	0.60	44.64		
	Saidarshan Opposite Road	Cum	2.00	68.00	0.60	0.60	48.96		
	House No #54 Guru Krupa	Cum	2.00	77.00	0.60	0.60	55.44		
	NTI Layout								
	1st A Cross Road								
	RHS	Cum	1.00	205.00	0.60	0.60	73.80		
	Saptagiri Layout								
	4th Cross Road	Cum	2.00	81.90	0.60	0.60	58.97		
	5th Cross Road	Cum	2.00	75.00	0.60	0.60	54.00		
	6th A Cross Road	Cum	2.00	76.70	0.60	0.60	55.22		
	Basic rate	130.00							
	Area weightage 6%	7.80							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	207.60							
	Total						**494.03**	**207.60**	**102561.00**
2.00	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.27-I.No.5.33)								
	Drain Cover Slab								
	IHECS Layout								
	6th Main Road	Sqm	2.00	62.00	0.90		111.60		
	Saidarshan Opposite Road	Sqm	2.00	68.00	0.90		122.40		
	NTI Layout								

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	1st A Cross Road								
	RHS	Sqm	1.00	205.00	0.90		184.50		
	Saptagiri Layout								
	4th Cross Road	Sqm	2.00	81.90	0.90		147.42		
	5th Cross Road	Sqm	2.00	75.00	0.90		135.00		
	6th A Cross Road	Sqm	2.00	76.70	0.90		138.06		
					Sub Total		**838.98**		
					Total		**838.98**		
	Consider 30% Qnty for Removing & Refixing						**251.69**		
	Basic rate	105.00							
	Area weightage 6%	6.30							
	Sub Total	**111.30**							
	Total						**251.69**	**111.30**	**28014.00**
3.00	KSRRB M2100 PCC 1 KSRRB M2100-10. Providing and laying Plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days Including cost of materials,labour, HOM curing form work, Scaffolding and Centering complete as per specifications.MORTH Specification No. 2100 Pg no:222 Item no:27.18								
	New Drain								
	K Veeranna Layout								
	Alkon Spirial Apartment Road	Cum	1.00	40.00	1.00	0.15	6.00		
	Sumadhuras Mathrushree Residency	Cum	1.00	42.00	1.50	0.15	9.45		
	Road PCC								
	Sumadhuras Mathrushree Residency	Cum	1.00	26.00	20.50	0.15	79.95		
	Basic rate	5115.00							
	Deduct the Cement cost as per SR 2018-19 (220x245.31/50)	-1079.36							
	Add the Cement cost as per Issue Rate 2018-19 (240x264.06/50)	1161.86							
	Sub total	5197.50							
	Area weightage 6%	311.85							
	Sub Total	5509.35							
	Total						**95.40**	**5509.35**	**525592.00**

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
4.00	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	New Drain								
	K Veeranna Layout								
	Alkon Spirial Apartment Road								
	Bottom Slab	cum	1.00	40.00	0.90	0.15	5.40		
	Side Walls	cum	2.00	40.00	0.15	0.60	7.20		
	Sumadhuras Mathrushree Residency								
	Bottom Slab	Cum	1.00	42.00	1.35	0.15	8.51		
	Side Walls	Cum	2.00	42.00	0.20	0.70	11.76		
	Basic rate	6670.00							
	Deduct the Cement cost as per SR 2018-19 (300x245.31/50)	-1471.86							
	Add the Cement cost as per Issue Rate 2018-19 (300x264.06/50)	1584.36							
	Sub total	6782.50							
	Area weightage 6%	406.95							
	Sub Total	7189.45							
	Total						**32.87**	**7189.45**	**236281.00**
5.00	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	Cum	From Item num 4				32.87		
		kg	Steel assumed 60Kg/Cum of Concrete				1971.90		
		tonne					**1.97**		
	Basic rate	68233.00							
	Area weightage 6%	4093.98							
	Sub Total	72326.98							
	Total						**1.97**	**72326.98**	**142622.00**
6.00	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	For New Cover Slab								
	K Veeranna Layout								

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Alkon Spirial Apartment Road	Sqm	1.00	40.00	0.90		36.00		
	Data rate	2337.00							
	Total						**36.00**	**2337.00**	**84132.00**
7.00	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incha								
	Drain Cover Slab								
	Sumadhuras Mathrushree Residency	Sqm	1.00	42.00	1.20		50.40		
	Data rate	**5418.00**							
	Total						**50.40**	**5418.00**	**273067.00**
8.00	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)								
	Road cut portion								
	IHECS Layout								
	6th Main Road	Cum	1.00	8.00	1.80	0.23	3.31		
	Saidarshan Opposite Road	Cum	1.00	13.00	1.00	0.23	2.99		
	House No #54 Guru Krupa	Cum	1.00	16.00	3.27	0.23	12.02		
	Cross Road	Cum	1.00	12.00	0.45	0.23	1.24		
	K Veeranna Layout								
	Cross Road	Cum	1.00	10.00	0.60	0.23	1.38		
	For CC Road								
	Sumadhuras Mathrushree Residency	Cum	1.00	26.00	20.50	0.30	159.90		
	NTI Layout								
	1st A Cross Road	Cum	1.00	61.00	1.20	0.23	16.84		
	Saptagiri Layout								
	4th Cross Road	Cum	1.00	16.00	0.60	0.23	2.21		
	6th A Cross Road	Cum	1.00	25.00	2.00	0.23	11.50		
	UGD cut portion								
	Saptagiri Layout								
	4th Cross Road	Cum	1.00	81.90	1.30	0.38	40.46		
	5th Cross Road	Cum	1.00	75.00	1.30	0.38	37.05		
	Basic rate	41.00							
	Area weightage 6%	2.46							

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	5Km lead= (2*1.28*5)	12.80							
	Sub Total	**56.26**							
	Total						**288.90**	**56.26**	**16253.00**
9.00	KSRRB 300-50. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by road roller attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM of machineries complete as per specifications. MORTH / Chapter 3(P.No.146, I.No.19.56)								
	K Veeranna Layout								
	Alkon Spirial Apartment Road	Sqm	1.00	64.00	5.50		352.00		
	Cross Road	Sqm	1.00	75.00	4.50		337.50		
	Saptagiri Layout								
	5th Cross Road	Sqm	1.00	75.00	6.70		502.50		
	Basic rate	39.00							
	Area weightage 6%	2.34							
	Sub Total	41.34							
	Total						**1192.00**	**41.34**	**49277.00**
10.00	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	UGD cut portion								
	Saptagiri Layout								
	4th Cross Road	Cum	1.00	81.90	1.30	0.15	15.97		
	5th Cross Road	Cum	1.00	75.00	1.30	0.15	14.63		
	Basic rate	1882.00							
	Area weightage 6%	112.92							
	Sub Total	1994.92							
	Total						**30.60**	**1994.92**	**61036.00**
11.00	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147)								
	K Veeranna Layout								
	Alkon Spirial Apartment Road	Sqm	1.00	64.00	5.50		352.00		
	Cross Road	Sqm	1.00	75.00	4.50		337.50		
	Saptagiri Layout								
	5th Cross Road	Sqm	1.00	75.00	6.70		502.50		
	Basic rate	6.00							
	Area weightage 6%	0.36							
	Sub Total	6.36							

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Total						**1192.00**	**6.36**	**7581.00**
12.00	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	K Veeranna Layout								
	Alkon Spirial Apartment Road	Cum	1.00	64.00	5.50	0.23	80.96		
	Cross Road	Cum	1.00	75.00	4.50	0.23	77.63		
	Road cut portion								
	IHECS Layout								
	6th Main Road	Cum	1.00	8.00	1.80	0.23	3.31		
	Saidarshan Opposite Road	Cum	1.00	13.00	1.20	0.23	3.59		
	House No #54 Guru Krupa	Cum	1.00	16.00	3.27	0.23	12.02		
	Cross Road	Cum	1.00	12.00	0.45	0.23	1.24		
	K Veeranna Layout								
	Cross Road	Cum	1.00	10.00	0.60	0.23	1.38		
	NTI Layout								
	1st A Cross Road	Cum	1.00	61.00	1.20	0.23	16.84		
	Saptagiri Layout								
	4th Cross Road	Cum	1.00	16.00	0.60	0.23	2.21		
	6th A Cross Road	Cum	1.00	25.00	2.00	0.23	11.50		
	UGD cut portion								
	Saptagiri Layout								
	4th Cross Road	Cum	1.00	81.90	1.30	0.23	24.49		
	5th Cross Road	Cum	1.00	75.00	1.30	0.23	22.43		
	New Road								
	Saptagiri Layout								
	5th Cross Road	Cum	1.00	75.00	6.70	0.23	115.58		
	Basic rate	1888.00							
	Area weightage 6%	113.28							
	Sub Total	**2001.28**							
	Total						**373.16**	**2001.28**	**746799.00**
13.00	KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	Alkon Spirial Apartment Road	Sqm	1.00	64.00	5.50		352.00		
	Cross Road	Sqm	1.00	75.00	4.50		337.50		
	Road cut portion								
	IHECS Layout								
	6th Main Road	Sqm	1.00	8.00	1.80		14.40		
	Saidarshan Opposite Road	Sqm	1.00	13.00	1.20		15.60		

Sl No	Description of work		Mesurement				Qty	Rate	Amount
		Unit	No.	L	B	D			
	House No #54 Guru Krupa	Sqm	1.00	16.00	3.27		52.27		
	Cross Road	Sqm	1.00	12.00	0.45		5.40		
	K Veeranna Layout								
	Cross Road	Sqm	1.00	10.00	0.60		6.00		
	NTI Layout								
	1st A Cross Road	Sqm	1.00	61.00	1.20		73.20		
	Saptagiri Layout								
	4th Cross Road	Sqm	1.00	16.00	0.60		9.60		
	6th A Cross Road	Sqm	1.00	25.00	2.00		50.00		
	UGD cut portion								
	Saptagiri Layout								
	4th Cross Road	Sqm	1.00	81.90	1.30		106.47		
	5th Cross Road	Sqm	1.00	75.00	1.30		97.50		
	New Road								
	Saptagiri Layout								
	5th Cross Road	Sqm	1.00	75.00	6.70		502.50		
	Basic rate	27.00							
	Area weightage 6%	1.62							
	Sub Total	28.62							
	Total						**1622.44**	**28.62**	**46434.00**
14.00	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.158,I.No.21.2).								
	Old Roads								
	IHECS Layout								
	6th Main Road	Sqm	1.00	62.00	7.00		434.00		
	Saidarshan Opposite Road	Sqm	1.00	68.00	8.00		544.00		
	House No #54 Guru Krupa	Sqm	1.00	77.00	5.20		400.40		
	Cross Road	Sqm	1.00	35.40	5.30		187.62		
	K Veeranna Layout								
	Cross Road	Sqm	1.00	27.90	5.80		161.82		
	NTI Layout								
	1st A Cross Road	Sqm	1.00	205.00	6.00		1230.00		
	Saptagiri Layout								
	4th Cross Road	Sqm	1.00	81.90	6.00		491.40		
	6th A Cross Road	Sqm	1.00	76.70	5.20		398.84		
	5th Cross Road	Sqm	1.00	75.00	6.70		502.50		
	Basic rate	5.00							
	Area weightage 6%	0.30							
	Sub Total	**5.30**							
	Total						**4350.58**	**5.30**	**23058.00**

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
15.00	KSRRB 500-7. Providing and **applying tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	Old Road	Sqm	From Item num 14				4350.58		
	Basic rate	12.00							
	Area weightage 6%	0.72							
	Sub Total	**12.72**							
	Total						**4350.58**	**12.72**	**55339.00**
16.00	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	old Road								
	for old Road Provide 20% Profile Correction		from item no14= (4350.58X20%)=870.12				870.12		
		Cum		870.12		0.05	43.51		
	Road cut portion								
	IHECS Layout								
	6th Main Road	Cum	1.00	8.00	1.80	0.05	0.72		
	Saidarshan Opposite Road	Cum	1.00	13.00	1.00	0.05	0.65		
	House No #54 Guru Krupa	Cum	1.00	16.00	3.27	0.05	2.61		
	Cross Road	Cum	1.00	12.00	0.45	0.05	0.27		
	K Veeranna Layout								
	Cross Road	Cum	1.00	10.00	0.60	0.05	0.30		
	NTI Layout								
	1st A Cross Road	Cum	1.00	61.00	1.20	0.05	3.66		
	Saptagiri Layout								
	4th Cross Road	Cum	1.00	16.00	0.60	0.05	0.48		
	6th A Cross Road	Cum	1.00	25.00	2.00	0.05	2.50		
	For full road Length								
	IHECS Layout								
	6th Main Road	Cum	1.00	62.00	0.40	0.05	1.24		
	Saidarshan Opposite Road	Cum	2.00	68.00	0.40	0.05	2.72		
	House No #54 Guru Krupa	Cum	1.00	77.00	0.40	0.05	1.54		
	Basic rate	6224.00							
	Area weightage 6%	373.44							
	Sub Total	**6597.44**							
	Total						**60.20**	**6597.44**	**397160.00**

Sl No	Description of work		Mesurement				Qty	Rate	Amount
		Unit	No.	L	B	D			
17.00	Providing and laying Bituminous Concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment , rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications.Clause 507 of MORTH V revision as per IRC SP-53-2015 - using 40-60 TPH capacity HMP with mechanical Paver, Gr-II (30-45mm) with 5.4 % of modified bitumen binder consisting of 4.97% VG- 30 bitumen (60/70 grade) 0.43% Plastomeric Thermoplastics (Waste plastic Additive).(P.No-171I No-21.78.12)								
	K Veeranna Layout								
	Alkon Spirial Apartment Road	Cum	1.00	64.00	5.50	0.04	14.08		
	Cross Road	Cum	1.00	75.00	4.50	0.04	13.50		
	IHECS Layout								
	6th Main Road	Cum	1.00	62.00	7.00	0.04	17.36		
	Saidarshan Opposite Road	Cum	1.00	68.00	8.00	0.04	21.76		
	House No #54 Guru Krupa	Cum	1.00	77.00	5.20	0.04	16.02		
	Cross Road	Cum	1.00	35.40	5.30	0.04	7.50		
	K Veeranna Layout								
	Cross Road	Cum	1.00	27.90	5.80	0.04	6.47		
	NTI Layout								
	1st A Cross Road	Cum	1.00	205.00	6.00	0.04	49.20		
	Saptagiri Layout								
	4th Cross Road	Cum	1.00	81.90	6.00	0.04	19.66		
	6th A Cross Road	Cum	1.00	76.70	5.20	0.04	15.95		
	5th Cross Road	Cum	1.00	75.00	6.70	0.04	20.10		
	Basic rate	7315.00							
	Area weightage 6%	438.90							
	Sub Total	7753.90							
	Total						**201.60**	**7753.90**	**1563211.00**
18.00	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	K Veeranna Layout								
	Alkon Spirial Apartment Road	Sqm	2.00	64.00	0.10		12.80		
	Cross Road	Sqm	2.00	75.00	0.10		15.00		
	IHECS Layout								
	6th Main Road	Sqm	2.00	62.00	0.10		12.40		
	Saidarshan Opposite Road	Sqm	2.00	68.00	0.10		13.60		
	House No #54 Guru Krupa	Sqm	2.00	77.00	0.10		15.40		
	Cross Road	Sqm	2.00	35.40	0.10		7.08		
	K Veeranna Layout								
	Cross Road	Sqm	2.00	27.90	0.10		5.58		
	NTI Layout								
	1st A Cross Road	Sqm	2.00	205.00	0.10		41.00		
	Saptagiri Layout								
	4th Cross Road	Sqm	2.00	81.90	0.10		16.38		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	6th A Cross Road	Sqm	2.00	76.70	0.10		15.34		
	5th Cross Road	Sqm	2.00	75.00	0.10		15.00		
	Basic rate	429.00							
	Area weightage 6%	25.74							
	Sub Total	454.74							
	Total						**169.58**	**454.74**	**77115.00**
19.00	Cement concrete pavement.Construction of un-reinforced plain cement concrete for pavement, using a grade concrete M30 over a prepared base with OPC coarse aggregate @ 0.69cum fine aggregate @ 0.46cum,coarse and fine aggregate confirming to IS:383-2016,with superplastisiser @3lts confirming to IS9103-2008.mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine,and curing including cost of all materials,labour,hire charges of machineries,all lead and lift charges etc., complete as per specifications. - do with OPC at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum Pg No.176Item No.22.6.1								
	Sumadhuras Mathrushree Residency	Cum	1.00	26.00	20.65	0.15	80.54		
	Basic rate	4916.00							
	Deduct the Cement cost as per SR 2018-19 (300x245.31/50) 360X	-1766.23							
	Add the Cement cost as per Issue Rate 2018-19 (300x264.06/50) 360X	1901.23							
	sub total	5051.00							
	Area weightage 6%	303.06							
	sub Total	**5354.06**							
	Total						**80.54**	**5354.06**	**431189.00**
								Grand Total	**4866721.00**
								GST Charges (12% of estimated cost)	**584007.00**
								Project management And Consultancy Charges(1% of estimated cost)	**48667.00**
								Miscellenious and rounding	**605.00**
								Total Amount	**5500000.00**

ADMINISTRATIVE APPROVAL
Accorded For Rs. 55.00 Lakhs only
P3698
Head of A/c.....
Div. Ref. No. 102/19-20 Date 29-2-2020
AE 5103
EE(BTP)

CERTIFICATE:

1) The work spot has been inspected and found to be necessary.
2) The work spot comes under B.B.M.P.
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

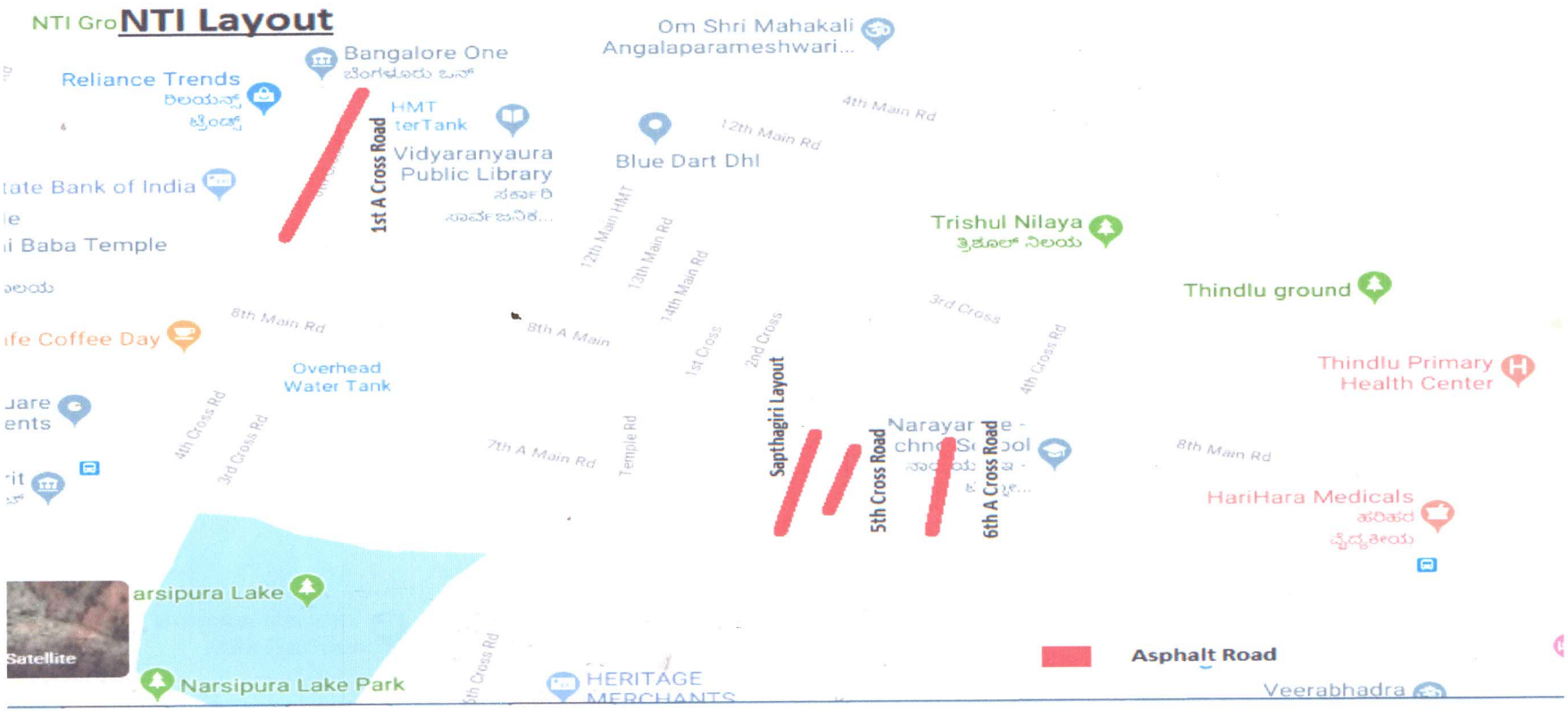
Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

Executive Engineer
Byatarayanapura Division

Technically sanctioned for Rs.
Rs in Words 55000.00 (FIFTY FIVE LAKH ONLY)
P.3698
Under
Job Code No. 009-20-000055
Registered as SE(Y)/TS/ 38 / 19-20 subject to conditions contained in enclosed No. 38 / 19-20 Dated: 04/03/2020

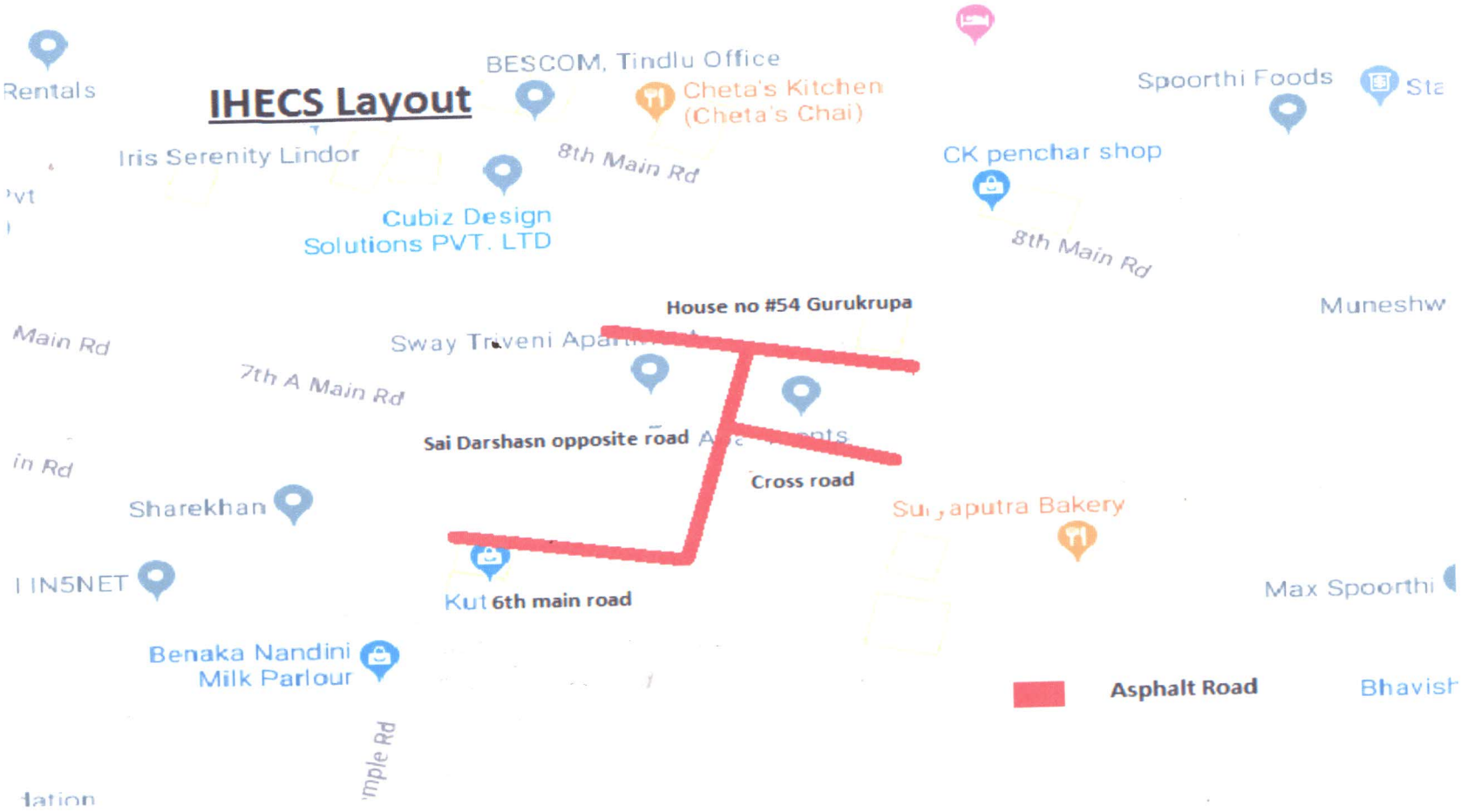
1) Improvements to Roads and Drains at Suverna Mahothsava Ground near HMT Layout, Thindlu Surroundings in Ward No.09, (Vidyaranyapura), Vidyaranyapura Sub Division.2) Construction of RCC Drain at Somanna Garden N/S of Main Road in Ward No.09, (Vidyaranyapura), Vidyaranyapura Sub Division.3) Construction of RCC Drain and Improvements of Roads at K. Veeranna Layout near Alkon Pearl Apartment in ward No.09 , (Vidyaranyapura), Vidyaranyapura Sub Division.



RUDRAPRASAD CONSULTANTS

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

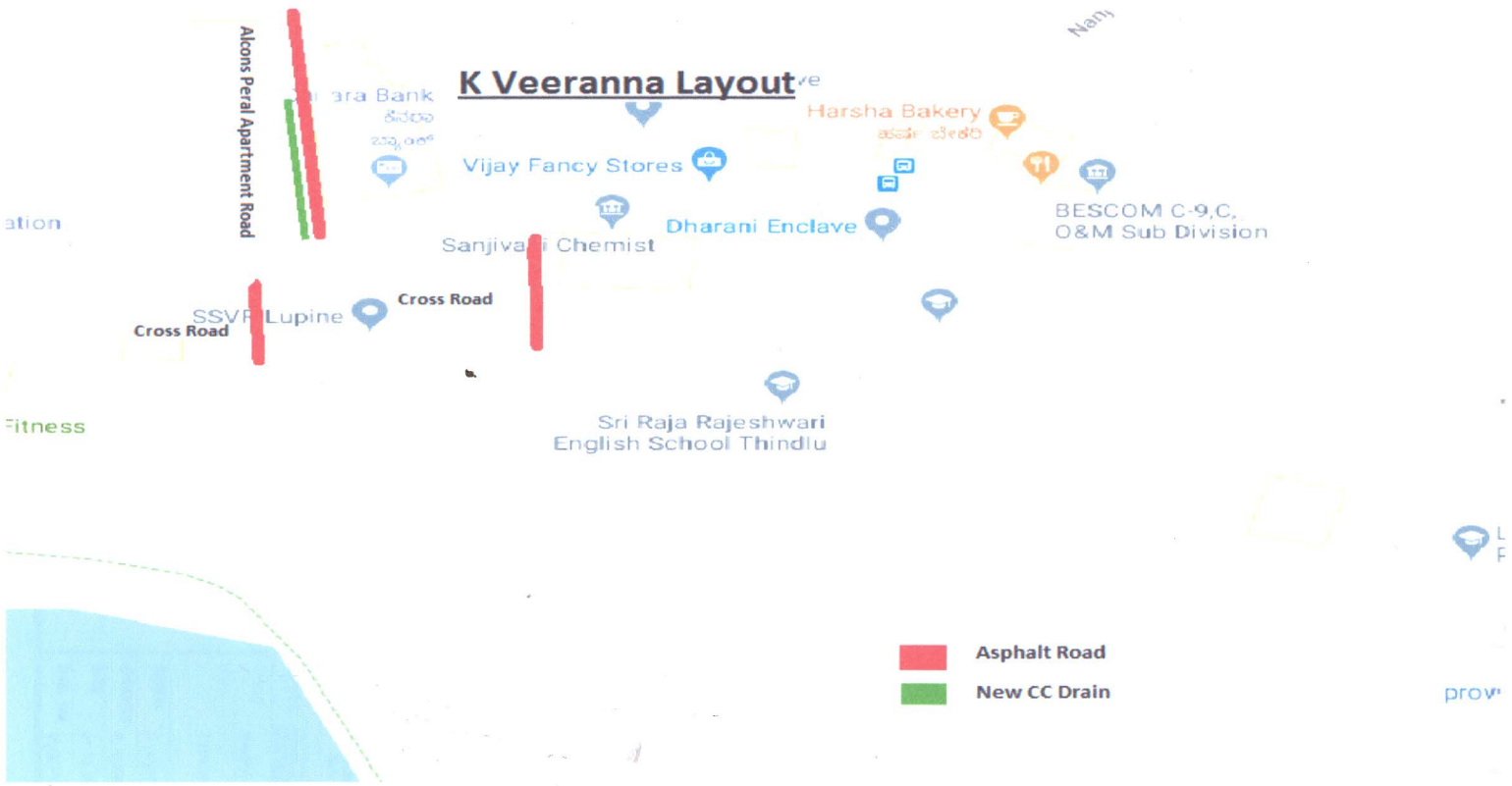
1) Improvements to Roads and Drains at Suverna Mahothsava Ground near HMT Layout, Thindlu Surroundings in Ward No.09, (Vidyaranyapura), Vidyaranyapura Sub Division.2) Construction of RCC Drain at Somanna Garden N/S of Main Road in Ward No.09, (Vidyaranyapura), Vidyaranyapura Sub Division.3) Construction of RCC Drain and Improvements of Roads at K. Veeranna Layout near Alkon Pearl Apartment in ward No.09 , (Vidyaranyapura), Vidyaranyapura Sub Division.



RUDRAPRASAD CONSULTANTS

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

1) Improvements to Roads and Drains at Suverna Mahothsava Ground near HMT Layout, Thindlu Surroundings in Ward No.09, (Vidyaranyapura), Vidyaranyapura Sub Division.2) Construction of RCC Drain at Somanna Garden N/S of Main Road in Ward No.09, (Vidyaranyapura), Vidyaranyapura Sub Division.3) Construction of RCC Drain and Improvements of Roads at K. Veeranna Layout near Alkon Pearl Apartment in ward No.09 , (Vidyaranyapura), Vidyaranyapura Sub Division.



RUDRAPRASAD CONSULTANTS

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97